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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant : Bruce Radl
Serial No. : 09/966,484
Filed : September 28, 2001
Title : IMAGING WITH SPECTRALLY DISPERSIVE ELEMENT FOR ALIASING
REDUCING

Art Unit : 2612
Examiner : Matthew L. Rosendale

Mail Stop Appeal Brief - Patents

Hon. Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY BRIEF FOR APPELLANT

I. EXAMINER'S ANSWER IGNORES THE ORDINARY MEANING OF "A DISPERSIVE ELEMENT" INTERPRETED IN THE LIGHT OF THE DESCRIPTION CALLED FOR BY ALL THE REJECTED CLAIMS NOT MET BY THE FOUR DICHROIC MIRRORS IN THE REFERENCE.

The Examiner's Answer states:

Response to Arguments

A. With regard to claims 1-3, 5, 6, 8, and 9

Applicants argue that the four dichroic mirrors 72, 74, 76, and 78 of figure 13 of Langworthy are not a single spectrally dispersive element as called for by all the claims.

In response to the arguments set forth by the applicants, the examiner first points out that nowhere in the claim language is there such language calling for a "single" spectrally dispersive element. In fact, claim 1 is written with open language with the word "comprising" allowing for many spectrally dispersive elements to be disclosed by the prior art as long as there is at least one spectrally dispersive element to meet that particular limitation of claim 1. Therefore, even if the mirrors are separately considered an "element", Langworthy still anticipates the claim.

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Alternatively, the examiner maintains that the set of four dichroic mirrors 72-78 of Langworthy in figure 13 constitute a spectrally dispersive element. Column 6, line 12 of Langworthy refers to the set of four dichroic mirrors 72-78 as an "optical device" that shifts the red component of the white light relative to the green component and shifts the blue component of the image with respect to the red and green components. Therefore by the functionally described by Langworthy of dispersing red, blue, and green spectral components of the white light, and by the definition of Langworthy for the four mirrors of Langworthy are indeed "a spectrally dispersive element" as claimed in claim 1 by the applicant.

Thus, whether "element" is interpreted as a single mirror or a collection of mirrors, the grounds of rejection remains the same, Langworthy anticipates claim 1 using either definition.

By the definition of the "spectrally dispersive element" of claim 1, provided on page 3 of the applicants' original disclosure of the specification that defines the broadest interpretation of the "spectrally dispersive element" of claim 1 as, "disperses white light". It is clear from the disclosure of Langworthy that the four dichroic mirrors 72-78 of figure 13 "disperse white light" output from the image taking lens. Even by subdividing the four dichroic mirrors into four separate "spectrally dispersive element", even though the examiner maintains that the set of mirrors constitutes a "spectrally dispersive element", each mirror "disperses white light" which is the applicants definition provided in the original disclosure of the specification on page 3. For example, the dichroic mirror provided for the green light in figure 13 will disperse white light by separating the green spectral component and pass the red and blue spectral components to their corresponding dichroic mirrors.

Therefore, the prior art of Langworthy meets all limitations including the "spectrally dispersive element" of claims 1-3, 5, 6, 8, and 9. Pp. 5-7.

Whereas Appellant sets forth multiple definitions of "a dispersive element," Brief pp. 5-6, the Examiner's Answer ignores these definitions and fails to identify any dictionary or other definition of "a dispersive element."

II. THE CLAIMED INVENTION USES DIFFERENT OPTICAL PRINCIPLES PRODUCING A SUPERIOR RESULT WITH VASTLY SIMPLER COMPONENTS COMPARED TO WHAT IS DISCLOSED IN THE REFERENCE.

The invention uses vastly different optical principles of a dispersive element as distinguished from four dichroic mirrors that produce a superior result as explained in the description and doing so with vastly simpler components involving a single dispersive element.

CONCLUSION

In view of the foregoing reasoning and the reasoning, authorities in the Brief and the inability of the reference to anticipate the rejected claims, the decision of the Examiner finally rejecting claims 1-6, 8 and 9 as anticipated by the reference should be reversed.

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Respectfully submitted,

FISH & RICHARDSON P.C.

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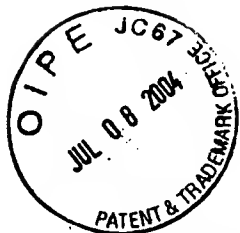
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